Web Application Logbook and Service

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Outline

- Core Requirements
- Other logbooks
- Implementation
- Plugin Framework
- Some Decisions
- NSCL required plugins
- What next?

Core Requirements

- REST layer (xml, json, webdav for attachments) with PHP and java API
- Authentication
- Plugin architecture
- Full text searching (including attachments)
- Edit/delete log entries while keeping history
- Support multiple logbooks and tagging
- Support to email, based on subscriptions
- Allow multiple attachments
- Reports

Other Logbooks

- Olog from Advance Light Source
  - PHP / mysql
- Hourlog from National Superconducting Cyclotron Lab
  - PHP / mysql
- eLog from Paul Scherrer Institute
  - C / file

Implementation - CakePHP

- MVC (Model - View - Controller)
- Easy to create plugins to a "core" application
- Supports REST (json, xml)
- Can add "vendor" code
    - sabreDAV (php implementation of webDAV)
    - Zend - lucene (for searching)
- Unit testing with SimpleTest

Plugin Framework

- Hooks to add to Log; Views, Controllers, Models
- Add new Views, Controllers, Models
- Plugin can have API for cross plugin communication or expose through REST

Decisions

- Simple local configuration from one directory
- Authentication
  - LDAP with failing over to database
  - REST is username/password or "Amazon style"
    - Authorization: TRUEREST username=eric&password=xxx
    - Authorization: TRUEREST username=eric&apikey=247b5a2f72df3752fff73f2746686daa
- Add/edit
  - Each log entry is hashed with the last 5 entries [from Olog]
  - Parent-child relationship
  - Original date is passed to new parent (modified date for edit time)
- Views
  - Heavily influenced by eLog, Olog, and Hourlog

NSCL Requirements (as plugins)

- IRMIS link to component
- Breakdown (unscheduled off, recovery time, etc.)
- Machine status (current configuration)
- On shift (who's on call, operators on shift)
- Short-term schedule
- Link to Trouble Report System
- Custom reports

What Next

- Get back to programming

Thank you!

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